REMARKS

The present Amendment is submitted in support of a Request For Continued Examination, includes cancellation of original claims 1-8 and adding new claims 9 and 10 to distinguish even more clearly over the previously cited prior art, including the latest citation, U. S. Patent No. 5,757,867 to Caulfield, et al.

With regard to new Claim 9, the Caulfield, et al reference describes techniques to simultaneously digitally translate a single spectral interval to base band, to reduce the bandwidth, and to change the sample rate of the signal so translated and filtered. It makes no claim, nor is it an obvious extension to perform the simultaneous translation of multiple contiguous spectral intervals, with equal or different bandwidths, to base band, to separate the signals residing in the multiple spectral intervals, and to output multiple output streams resampled to match the symbol rates of each of the different signals so translated and filtered. Accordingly, it is respectfully contended that the structure recited in Claim 9 is neither anticipated nor taught by Caulfield either singly or combined with any other prior art and is therefore allowable.

Now referring to new claim 10, the Caulfield, et al patent disclose in Fig. 2 a decimating filter that reduces the bandwith and sample rate of a base band centered signal. In particular, the single device (element 142) is a SINC that reduce the band width and sample rate of base band signal without multipliers. This filter is not capable of being applied to a non base band centered signal and is not capable of simultaneously separating multiple spectral intervals and outputting multiple data streams resampled to the bandwidth of each data stream. The spectral translation of Fig. 2 is performed external to the filter in the complex mixer (element 12). The multiple spectral translations of claim 3 are performed in the resampling polyphase filter. The filter shown in Fig. 2 (element 142) is only capable of processing, i. e. filtering and resampling a single data stream. The filter in claim 3 simultaneously processes, i. e., translates, filters, and resamples, multiple, of various bandwidths. These are very different functions and performed in substantially different signal processing implementations. Accordingly, it is respectfully contended that the structure recited in Claim 10 is neither anticipated nor taught by Caulfield either singly or in combination with any other prior art and is therefore allowable with claim 9.

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